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EXAMINER

PAK, HANNAH J

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Art Unit: 1796

Attachment to Box 11:

The applicants' arguments filed 12/22/2009 are fully considered but are not found persuasive for the following reasons below:

(A)

Applicants' Argument: The material for a speaker cabinet in Ishida et al. does not directly relate to a material for a speaker diaphragm and therefore, there would not have been any reason for one of ordinary skill in the art to conduct any further research to find out whether the material in Ishida et al. is suitable for a speaker diaphragm. Thus, there would have been no reason to combine the teachings of Ishida et al. with those of Uryu et al. or Johnson et al. (see Pages 3-5 of the Applicants' Remarks).

Examiner's Response: Ishida et al. teach the claimed mixture containing among other things, a non-chlorinated resin, such as polyester and polypropylene, and a modified cellulose powder, useful for molding it into a speaker cabinet, which is also inclusive of a speaker diaphragm (Paragraph 3). It can be inferred that the same material used to make the speaker cabinet is utilized to form the speaker diaphragm (Paragraph 3). Moreover, the mixture of excellent materials improves acoustic properties (Paragraph 5). Such mixture taught by Ishida et al., corresponding to the claimed mixture, can be used to form the acoustic diaphragms of Uryu et al. or Johnston et al. to enhance their acoustic properties. Thus, it would have been obvious to one of ordinary skill in the art to use the claimed mixture taught by Ishida et al. to form the acoustic diaphragms of Uryu et al. or Johnston et al. with a reasonable expectation of successfully obtaining desired acoustic properties.

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(B)

Applicants' Argument: There is no teaching of the thickness of the speaker as claimed (see Page 6 of the Applicants' Remarks).

Examiner's Response: Ishida et al. teach that the thickness of their speaker is 4 mm or less (Paragraph 19), which is inclusive of the claimed thickness of 0.1-0.5 mm. Thus, Ishida teaches the claimed thickness of the speaker.

/Hannah Pak/

Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796